

IN THE ABSTRACT

Please Replace the Abstract with the following:

--Provided herein is a logic tree for steering electromagnetic energy. The logic tree includes a plurality of stages. The first stage includes a branch for directing energy to a similar branch in each succeeding stage. Each stages contains  $2^{n-1}$  branches, where n is the stage number. In particular embodiments, each branch includes an active element for directing electromagnetic energy into one of a first and a second paths, and a passive element disposed in the second path.--